

Spring persistence, transition and resurgence of El Nino

Sang-Ki Lee (1,2), Pedro N. DiNezio (3), Eui-Seok Chung (4),
Sang-Wook Yeh (5), Andrew T. Wittenberg (6), and Chunzai Wang (2)

1: Cooperative Institute for Marine and Atmospheric Studies, University of Miami, Miami, Florida

2: NOAA Atlantic Oceanographic and Meteorological Laboratory, Miami, Florida

3: International Pacific Research Center, School of Ocean and Earth Science and Technology, University of Hawaii at Manoa, Honolulu, Hawaii

4: Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, Miami, Florida

5: Department of Marine Sciences and Convergent Technology, Hanyang University, Ansan, Korea

6: NOAA Geophysical Fluid Dynamics Laboratory, Princeton, New Jersey

Lee, S.-K., P. N. DiNezio, E.-S. Chung, S.-W. Yeh, A. T. Wittenberg and C. Wang: Spring persistence, transition and resurgence of El Nino, *Geophys. Res. Lett.*, doi:10.1029/2014GLXXXXXX.

Introduction

The auxiliary material contains five figures.

Auxiliary Material Figure S1 shows the time-longitude plots of the tropical Pacific SST anomalies averaged between 5S and 5N for 21 El Ninos that occurred during 1949-2013, derived from ERSST3. Units are degC.

Auxiliary Material Figure S2 shows the scatterplot of (a) SSTAs in Nino 3 (AMJ [+1]) versus PC1, (b) SSTAs in Nino 3.4 (DJF [0,+1]) versus PC1, (c) SSTAs in Nino 3.4 (OND [+1]) versus PC2, and (d) SSTAs in Nino 3 (AMJ [0]) versus PC2. The two digit numbers indicate the El Nino onset years. For each plot, the black solid line is the linear regression, whereas the two dashed gray lines show the standard error of the linear regression.

Auxiliary Material Figure S3 shows the time-longitude plot of the climatological equatorial Pacific SSTs averaged between 5S and 5N. The units are degC.

Auxiliary Material Figure S4 shows the time-longitude plots of the equatorial Pacific SST (color shade) and rainfall (contour) anomalies averaged between 5S and 5N, for (a) CM, (b) CM+EOF1, (c) CM-EOF1, (d) CM+EOF2, and (e) CM-EOF2 of the 21 El Ninos during 1949-2013. NOAA's precipitation reconstruction [Chen et al., 2002] is used to compute the rainfall anomalies. The units are degC for SST, and mm/day for rainfall.

Auxiliary Material Figure S5 shows the time-longitude plots of (a) CM and the two (b and c) leading inter-event EOFs of the tropical Pacific SSTAs averaged between 5S and 5N, for 22 La Ninas during 1949-2013. Units are in degC.

Lee_etal_2014_supp.pdf

This file contains two auxiliary figures.